ORIGINAL

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

Revision of the Commission's Rules	)	
To Ensure Compatibility with	)	CC Docket No. 94-102
Enhanced 911 Emergency Calling Systems	)	

REPLY COMMENTS OF TELE-COMMUNICATIONS ASSOCIATION

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SUMMARY

TCA supports the Commission's goal of assuring PBX/E911 compatibility. Nonetheless, the record demonstrates that fundamental technical and policy issues must be resolved before the Commission can reasonably impose specific compatibility obligations. Most notably, the comments reveal serious questions regarding the technical feasibility and timing of PBX/E911 compatibility. In light of the complexity of these issues, an industry-driven process may be the best means of gathering information and developing consensus solutions. The Commission should therefore solicit the advice of industry representatives -- including PBX owners, equipment manufacturers, user groups, LECs and public safety entities -- before adopting final rules. While the industry forum is addressing technical and timing issues, the Commission should resolve critical policy issues, such as developing an equitable cost recovery mechanism and clarifying the liability of PBX owners and service providers.

The record further demonstrates that several of the proposed rules would be unnecessarily burdensome and would needlessly disrupt existing operations. These proposals should be clarified or modified in several respects. Specifically, the Commission should:

- confirm that the new compatibility rules do not require retrofitting of existing equipment;
- define "emergency response location" to include all telephones that are in close enough proximity to permit effective emergency response if assigned the same location identifier;

- exempt systems that serve a single emergency response location from the compatibility rules;
- abandon its stringent verification proposal, or alternatively, adopt less restrictive qualifications;
- abandon the proposed P=0.01 blocking requirement, and instead, allow users reasonably to determine how many 911 trunks to utilize;
- clarify that users with internal emergency response resources do not need to pass 911 calls to the LEC for delivery to an external PSAP;
- preempt inconsistent state and local compatibility regulations;
- ensure that the updated location information is transmitted in a timely manner without imposing unnecessary burdens on PBX owners; and
- eliminate the requirement that callers have the ability to reach emergency services without first dialing "9".

By making these changes, addressing funding and liability issues, and convening an industry forum to address technical and timing issues, the Commission can better assure that compatibility is achieved promptly and effectively without imposing undue burdens on PBX owners.

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REPLY COMMENTS

Tele-Communications Association ("TCA"), by its attorneys, respectfully submits its reply comments on the Notice of Proposed Rulemaking in the above-captioned proceeding. TCA continues to support the Commission's objective of assuring PBX/E911 compatibility. The record makes clear, however, that the Commission should clarify and modify many of its proposed rules in order to assure that compatibility is achieved in a cost effective manner that does not impose undue burdens on PBX owners or needlessly disrupt existing operations. Moreover, the comments demonstrate that critical policy issues, including funding and liability, must be resolved before specific compatibility obligations are imposed.

I. THE COMMISSION SHOULD REFER TECHNICAL ISSUES TO AN ADVISORY COMMITTEE AND RESOLVE IMPORTANT POLICY ISSUES BEFORE IMPOSING SPECIFIC COMPATIBILITY OBLIGATIONS

A. Technical Issues and Timing of Deployment

The proposed rules would establish strict deadlines for assuring compatibility of PBX equipment with enhanced 911

services. As TCA indicated in its opening comments, however, many significant technical impediments must be resolved before PBX/911 compatibility can be achieved. This view was shared by numerous equipment manufacturers and users who expressed concerns about the technical feasibility and timing of the proposed deadlines.[1]

Against this background, imposition of rigid regulatory mandates would be premature and counter-productive. The technical hurdles to compatibility can best be resolved not through regulatory intervention, but, as several parties suggested, through referral of technical issues to a rulemaking committee, advisory committee, or industry forum.[2] As Northern Telecom noted, however, such an entity must include all affected interest groups, including PBX owners:

> By bringing together all of the interested parties, including a representative of the Commission, solutions to any outstanding problems can be developed. . . [S]uch a process will be more effective than simply setting a delayed time period for implementing changes without specifying how that is to occur, since the usual industry standard setting processes may not include representation from all of the affected interest groups.[3]

Such a flexible, consensus process will help assure that cost-effective technology to achieve compatibility is made available before users or other parties are compelled to meet compliance

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[1] See, e.g., NATA at 16; Redcom at 10; Siemens Rolm at 3; Washington and Oregon TRACER at 8.

[2] See, e.g., Ad Hoc at 4; Northern Telecom at 5; BellSouth at 4.

[3] See also Ad Hoc at 12.

deadlines. Once the technical issues have been resolved and compliant equipment is available, the Commission can proceed with adopting final rules.

B. Funding and Liability Issues

The opening comments also indicate that significant funding and liability issues must be resolved before compliance obligations are imposed. The Commission should address these policy matters while the industry resolves the outstanding technical and timing issues.

Funding. The record establishes that implementation of PBX/E911 compatibility will create significant costs, including:

> (1) the costs of designing station identification capabilities into new CPE, (2) the costs of adding station identification capabilities to CPE that has been manufactured but not installed prior to applicable effective dates, (3) the costs associated with maintaining correct station identification and other non-manufacturing costs associated with implementing station identification requirements in CPE, and (4) the costs of the required E911 services -- including dedicated CAMA trunks which may not be usable for any other purpose -- to be provided by local exchange carriers (LECs).[4]

Yet, as noted by several commenters, the Commission has not addressed who will bear these costs.[5] It is imperative that the deployment of compatibility technology not be used as an excuse for LECs to impose unique surcharges on business and institutional consumers, assertedly as a means of recovering LEC implementation costs. Rather, as NATA explained, any LEC costs

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[4] NATA at 12.

[5] See, e.g., Ad Hoc at 10; NATA at 19-20.

should be fully documented and recovered from the general body of ratepayers.[6] In addition, service providers and manufacturers must make available trunks and upgrades to support compatibility at reasonable rates. TCA urges the Commission to explicitly address how it intends the costs of compatibility to be borne, and to allow the public to comment on these cost issues before it imposes any affirmative obligations.

Liability. The proposed rules also implicitly raise complex liability questions regarding data base information, and could arguably be interpreted as requiring PBX owners to guarantee the privacy and accuracy of their location information. As Ad Hoc noted, the Commission has not addressed who will be responsible for protecting the privacy of data base information and preventing unauthorized access.[7] To avoid future uncertainty, the Commission should explicitly address these liability issues.

II. THE COMMISSION SHOULD CLARIFY AND MODIFY ITS PROPOSED RULES IN ORDER TO REDUCE UNCERTAINTY AND ELIMINATE UNWARRANTED BURDENS

A. Retrofitting of Equipment

TCA supports the prospective application of any compatibility rules. Imposing compatibility obligations on existing equipment would be impractical and unduly burdensome, as

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[6] NATA at 19. Wireline LECs typically add a monthly surcharge to every subscriber's bill in order to fund wireline 911 services. Northern Telecom at 62.

[7] Ad Hoc at 7.

a number of commenters recognized. For example, NATA explained that without grandfathering,

> much of the existing installed base, valued at many billions of dollars would have to be prematurely replaced. In other cases, in order to avoid totally replacing equipment, customers would have to undertake a variety of costly and burdensome retrofitting operations. It is clearly inappropriate to impose such requirements on customers without a compelling demonstration that the benefits outweigh the costs.[8]

Accordingly, in order to protect PBX owners from incurring significant and unnecessary financial burdens, TCA urges the Commission to confirm that any new rules will apply only to new equipment.[9]

B. Definition of "Emergency Response Location"

In its comments, TCA urged the Commission to clarify that each telephone need not be considered a separate emergency response location. Many commenters -- including APCO, NENA, and NASNA -- agree that requiring a separate location identifier to be assigned to each calling station would unnecessarily burden users and LECs without providing additional useful information.[10] Indeed, in many contexts, multiple calling stations are located

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[8] NATA at 16; see also UTC at 5.

[9] Even with this confirmation, users are likely to be required to retrofit or prematurely replace existing systems whenever one component of those systems is replaced, unless new and old equipment are compatible. See OPASTCO at 5; UTC at 5.

[10] See APCO et al. at 21-22; Washington and Oregon TRACER at 13-14; NATA at 12; AT&T at 5-6; TIA at 10.

in close proximity to one another and are observable by each other. As noted by APCO:

> [E]very station in the PBX does not necessarily need to be uniquely identified. The identification only needs to be to the level required to . . . locate the caller accurately enough to provide a prompt response by the applicable public safety agencies.[11]

Consequently, the Commission should state that telephones that are in close enough proximity to permit effective emergency response if assigned the same location identifier should be considered to occupy the same emergency response location. Alternatively, as AT&T suggested, "emergency response location" should be defined as "an area of a size and configuration permitting an emergency response team dispatched to that area to locate the caller quickly."[12] This clarification will ensure effective emergency response, while avoiding the imposition of unnecessary burdens.

In addition, the record makes clear that the Commission need not impose location identification requirements on systems that serve a single emergency response location. As UTC explained:

> Physically small locations do not present the same problems as large locations because sources of emergency calls can be easily identified. It is therefore not necessary that each piece of terminal equipment be capable of providing automatic location information (ALI) as long as the location of the PBX is provided to the public safety answering point.[13]

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[11] APCO at 21.

[12] AT&T at 6.

[13] UTC at 4; see also BellSouth at 6; NATA at 11.

Hence, in order to avoid imposing unnecessary burdens on smaller systems, the Commission should exempt systems that serve a single emergency response location from any location identification rules.

C. Performance of Verification Work

The proposed rules would require that installation and verification work be performed by either a licensed engineer or a person with at least six months' experience in terminal equipment installation and specific training in operation of E-911 emergency service trunks and performance of proper verification procedures. As explained in TCA's opening comments, this rule unnecessarily restricts the scope of qualified verification personnel.[14] Many other parties agreed.[15] For example, NATA questioned the appropriateness of regulating the qualifications necessary for the performance of "routine operations."[16] Moreover, to the extent verification requirements are in order, the commenters agree that the particular qualifications selected by the Commission are inappropriate. As Redcom Laboratories observed, the proposed rule would allow a licensed civil engineer who did not know anything about telephony to perform the work, while excluding very competent, but unlicensed, telephone

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[14] TCA at 8.

[15] See, e.g., Washington and Oregon TRACER at 13; Northern Telecom at 25; NATA at 22; Redcom at 3; TIA at 19.

[16] NATA at 22.

engineers.[17] Similarly, Northern Telecom noted that many systems are "simple to install and require very little expertise."[18] In these cases, stringent requirements are clearly unnecessary.

For these reasons, TCA urges the Commission to abandon its stringent verification proposal. As an alternative, E911 verification procedures can be made part of the vendor training program, and anyone who has completed that program, or who has six months experience performing installation and verification procedures under the guidance of a trained supervisor, should be permitted to perform and supervise E911 installation and verification functions.

D. P.01 Grade of Service

Proposed § 68.320(d) would require users to have sufficient E911 trunks to "maintain an availability of P=0.01 based on the number of users served." Several parties shared TCA's assessment that this requirement is inappropriate, given the very small number of 911 calls. For example, Ad Hoc noted that one of its member companies operates a 5,000 station facility, but experiences no more than one call to 911 per calendar quarter. Based on sizing tables for normal network traffic, the new rule would require that user to maintain 50 dedicated 911 trunks.[19] Similarly, Northern Telecom sells a telephone system which has

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[17] Redcom at App. 3.

[18] Northern Telecom at 25.

[19] Ad Hoc at 9, n. 12.

the capacity for six trunks and sixteen stations. Under the proposed rules, 16 percent of that system's capacity would have to be occupied by a line that is rarely used.[20] These examples confirm that the Commission's grade of service requirement is excessive.

Moreover, at an average charge of roughly 50 dollars per trunk per month, a P.01 requirement would be prohibitively expensive. Using Ad Hoc's example, the company concerned would face annual charges of roughly $25,000 to assure that four calls occurring at some point during the year are not blocked. As TIA stated, "the probability of simultaneous 911 calls not associated with a common disaster is incredibly small, even for the largest of equipment installations."[21] Consequently, the costs of a strict grade-of-service requirement plainly outweigh any potential benefits.

For the same reason, APCO's suggestion that the Commission require a minimum of two trunks from each point of presence to the E911 trunk is inappropriate.[22] As noted by the New Jersey OETS, requiring two trunks from each PBX switch is unwarranted because the "data trunks are a costly ongoing expense for PBX users," and the "amount of additional dedicated ports on 9-1-1 tandems to support the additional trunks would require a major

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[20] Northern Telecom. See also TIA at 14; Redcom at 5; Northern Telecom at 32-33, 36-37; AT&T at 15; Ad Hoc at 9 n.12; ICA at 3-5.

[21] TIA at 14.

[22] APCO at 39; see also NYNEX at 6.

redesign of existing 9-1-1 systems."[23] Hence, TCA urges the Commission to abandon its grade of service proposal, and instead, to allow users reasonably to determine how many trunks to utilize.

E. Internal Emergency Response Systems

In its opening comments, TCA asked the Commission to clarify that users with their own internal emergency response organizations need not pass 911 calls to the LEC for delivery to an external PSAP. As TCA noted, users such as universities, large corporations, and hospitals often have internal emergency response resources that are specially equipped to meet their unique needs. By requiring these users to notify both internal and external emergency response entities, the Commission may impede the overall effectiveness of response efforts.[24] The record supports TCA's request. For example, Ad Hoc explained that:

> The Commission's efforts to impose a uniform means of accessing public safety agencies may cause considerable confusion . . . and may inadvertently conflict with industry practices involving on-site security and/or medical personnel who may be better prepared to respond to

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[23] NJ OETS at 9.

[24] Bell Atlantic suggests that the Commission should require "college campuses, hospitals, military installations or other campus-type settings" to provide updated 911 information. Bell Atlantic at 6. To the extent that these systems have internal response systems, Bell Atlantic's proposal should be rejected.

emergencies more quickly and with more appropriate equipment than public agencies.[25]

Accordingly, the Commission should state that users with internal emergency response capabilities are not required to pass 911 calls to the LEC for transmission to the PSAP.

F. Preemption of Inconsistent State Regulation

The record almost uniformly confirms that preemption of state regulation is crucial to ensuring nationwide compatibility of enhanced 911 systems.[26] APCO, et al. however, asked the Commission to allow state and local authorities to determine how LECs and PBXs should interconnect.[27] TCA urges the Commission to reject APCO's suggestion. As the Commission has recognized, national uniformity is needed "to avoid confusion among telephone users connected to PBXs and to ensure that PBX equipment operates on the public switched telephone network . . . at an optimal level for emergency proposes."[28] Without preemption, companies would have to operate under inconsistent and potentially conflicting regulations to the detriment of the public health and safety. Moreover, PBX equipment likely would become prohibitively expensive, because manufacturers would have to

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[25] Ad Hoc at 8. See also Redcom at 7; Washington and Oregon TRACER at 10; State of California Department of Corrections at 2.

[26] See, e.g., GE Capital-Rescom at 13-14; Redcom at 15; TIA at 5; Washington and Oregon TRACER at 15; MCI at 1.

[27] APCO at 30.

[28] Notice at ¶ 59.

tailor their products to hundreds of potentially conflicting state and local requirements.

G. Transmission of Updated Location Information to LECs

TCA agrees that PBX owners should be required to transmit updated location information to LECs on a timely basis, as long as the rules allow for flexibility. As documented by Ad Hoc, the maintenance and transmission of updated information may involve considerable burdens for large installations. Likewise, Washington and Oregon TRACER suggest that weekly updates will satisfy the Commission's objectives and the realistic needs of emergency responders. In this regard, TRACER noted that weekly updates have been working well in Washington State for several years.[29] In light of these comments, TCA urges the Commission to adopt a rule that ensures "timely and accurate database maintenance" but does not impose unnecessary burdens on PBX owners.

H. Ability to Reach 911 Without Dialing "9" First

The Commission's proposed rules would require that callers using PBX stations "have the ability to reach emergency services by dialing 911 without having to dial any additional digits." In its opening comments, TCA demonstrated that this requirement would create serious problems with established dialing plans and

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[29] In contrast, NYNEX suggests that any updates should be made on a daily basis. NYNEX at 4. Such a requirement could be unduly burdensome, given the infrequent occurrence of 911 calls.

would be very difficult to implement. In particular, because many multi-line businesses require users to dial "9" to access an outside line, the Commission's rule would create implementation difficulties and customer confusion.

The opening comments confirm TCA's initial concerns regarding the proposed rule. Several commenters noted the difficulties of prohibiting the use of 9-911 from PBX's that require "9" to reach an outside line.[30] In addition, although some public safety organizations support the Commission's rules,[31] others recognize the disadvantages of requiring callers to be able to reach emergency services without dialing a "9." In particular, the Georgia Chapter of NENA noted that users accustomed to dialing "9" for an outside line may try to dial 9-911 to access emergency services.[32] Moreover, the comments from the manufacturing community indicate that there are technical problems with the Commission's proposal.[33] For these reasons, the Commission should not require that users have the ability to reach 911 without dialing a preliminary digit to access an

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[30] See UTC at 3; Ad Hoc at 7-8; Ameritech at 3-4; Washington and Oregon TRACER at 9.

[31] APCO at 17.

[32] Georgia NENA at 1. Due to this problem, Georgia NENA declined to take position on the ability to reach 911 without dialing a 9.

[33] See Siemens Rolm at 3; Northern Telecom at 30.

outside line. A better approach would be to educate users that 911 calls will be treated the same as all outside calls.[34]

III. CONCLUSION

TCA supports requiring PBX systems to operate effectively with enhanced 911 systems. However, the record makes clear that fundamental technical and policy issues must be resolved before specific compliance obligations are adopted. To this end, the Commission should refer technical issues to an industry-driven process operating under clear deadlines, and concurrently should adopt rational funding and liability policies that reduce unwarranted burdens on consumers. The Commission also should clarify and modify the proposed rules as discussed above in order

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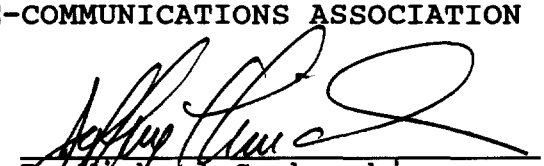
[34] At least one commenter interpreted the Commission's rules as requiring a MLTS to route emergency calls dialed using 911 or 9-911. See, Siemens Rolm at 3. Although dual access to emergency response personnel would minimize caller confusion, the substantial technical problems in allowing access to an outside line without an initial "9" render such a solution untenable.

to reduce confusion and avoid unnecessary interference with existing operations.

Respectfully submitted,

TELE-COMMUNICATIONS ASSOCIATION

By: 

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